

element, with one second [compound] reactant per reaction vessel;

(b) concurrently reacting said first and second [compounds] reactants in each of the plurality of reaction vessels under solution phase conditions wherein each of the first and second reactive groups react with one another by an addition reaction to form a compound; and

(c) repeating steps (a) and (b), thus forming the combinatorial array of at least 500 different compounds in solution;

wherein each compound composing the combinatorial array comprises a same common linear, branched, or cyclic molecular core comprising at least three atoms of carbon, nitrogen, oxygen, phosphorus or sulfur having the first and second structural diversity elements attached thereto, and further wherein the compounds composing the array differ from one another by at least one change in a structural diversity element.

24. (Amended) The method of claim 22 wherein for each cycle the reagents in at least 80 different reaction vessels are concurrently reacted [per cycle].

#### REMARKS

Applicants appreciate the courtesies extended by Examiner P. Ponnaluri to applicants' representatives, Allan Fanucci and Ian Scott, during a telephonic conference on May 1, 2000. At the conference, the outstanding rejections of the claims were discussed and resolved. Further, it was noted that Applicants filed an Information Disclosure Statement with references, and a Petition to Correct Inventorship. The comments appearing herein are substantially in accordance with those which were presented and discussed during the interview.

Claims 10-13, 17, 18 and 22-25, as amended, appear in this application for the Examiner's review and consideration. Claims 11 and 24 have been amended to more particularly point out and distinctly claim the subject matter which Applicants regard as their invention. These claims relate to methods of making arrays of compounds. The claim amendments are supported by the specification and have been made to expedite prosecution of the present application. As no new matter has been added, these claim changes and additions should be entered at this time. Claims 1-7, 16 and 19, which relate to arrays of compounds, have been cancelled without prejudice or disclaimer of the subject matter of these claims. Applicants reserve the right to present these claims, or other claims directed to disclosed subject matter, in another application.